

WHAT IS CLAIMED IS:

1 1. A system comprising an information center device,
 2 a terminal machine connected to said information
 3 center device, and a navigation device which is
 4 mountable on a moving object, wherein,
 5 said navigation device comprises,
 6 a recording medium being rewritable on which map
 7 data is recorded, and
 8 history information recording means which
 9 records drive history information of said moving
 10 object in said recording medium, and
 11 said terminal machine comprises,
 12 a judging means which judges whether or not said
 13 drive history information is recorded in said
 14 recording medium,
 15 map updating means which reads out said drive
 16 history information when it is determined the drive
 17 history information is recorded in said recording
 18 medium, and records the map data received from said
 19 information center device, in a recording medium
 20 prepared for said navigation device, and
 21 said information center device comprises,
 22 a storage unit which stores map data,
 23 a sending means which sends said map data to said

24 terminal machine, and
 25 a receiving means which receives said drive
 26 history information from said terminal machine.

1 2. The system according to claim 1, wherein,
 2 said terminal machine comprises a means which
 3 reads out said drive history information, and
 4 thereafter erases said drive history information
 5 recorded in the recording medium that is prepared for
 6 said navigation device.

1 3. The system according to claim 1, wherein,
 2 said terminal machine comprises a map judging
 3 means which determines whether or not the map data
 4 recorded in the recording medium prepared for said
 5 navigation device is older than the map data received
 6 from said information center, and
 7 said map updating means records the map data
 8 received from said information center device into the
 9 recording medium prepared for said navigation device,
 10 when it is determined that the map data recorded in
 11 the recording medium prepared for said navigation
 12 device is older than the map data received from said
 13 information device.

1 4. The system according to claim 1, wherein,
 2 the storage unit in said information center
 3 device stores statistical traffic information,
 4 said information center device includes a means
 5 which sends said statistical traffic information to
 6 said terminal machine, and
 7 said terminal machine comprises a means which
 8 records the statistical traffic information received
 9 from said information center device in the recording
 10 medium provided in said navigation device, when it is
 11 determined that the drive history information is
 12 recorded in the recording medium prepared for said
 13 navigation device.

1 5. The system according to claim 1, wherein,
 2 said navigation device comprises a means which
 3 records recording ratio of said drive history
 4 information, and
 5 said terminal machine comprises a means which
 6 displays an update charge that is defined in accordance
 7 with the recording ratio of said drive history
 8 information.

1 6. The system according to claim 1, wherein,
 2 Said navigation device comprises a means which

3 mounts and demounts said recording medium.

1 7. The system according to claim 1, wherein,
2 said navigation device comprises,
3 a sending means which is connected to said
4 information center device and sends said drive history
5 information to the information center device, and
6 a recording means which records in said recording
7 medium, sending identification information which
8 distinguishes between the drive history information
9 having already been sent to said information center
10 device and the drive history information having not
11 been sent thereto yet, wherein,
12 said sending means excludes the drive history
13 information having already been sent to said
14 information center device from a target for sending.

1 8. The system according to claim 1, wherein,
2 said navigation device comprises,
3 a sending means which is connected to said
4 information center device and sends said drive history
5 information to the information center device, and
6 a recording means which records in said recording
7 medium, sending identification information which
8 distinguishes between the drive history information

9 having already been sent to said information center
10 device and the drive history information having not
11 been sent thereto yet, and,

12 said information center device comprises an
13 information selecting means in which, when said
14 information center device receives from said terminal
15 machine, the drive history information with
16 identification information being attached,
17 indicating that the information has already been sent,
18 the information center device erases any one of
19 redundant drive history information.

1 9. The system according to claim 8, wherein,
2 when said information selecting means receives
3 from said terminal machine, the drive history
4 information to which the identification information
5 is attached indicating that the drive history
6 information has already been sent, the drive history
7 information sent by the sending means of said
8 navigation device is erased.

1 10. The system according to claim 1, wherein,
2 said navigation device comprises,
3 a sending means which is connected to said
4 information center device, and sends said drive

5 history information to the information center device,
 6 and
 7 an erasing means which erases from said recording
 8 medium, the drive history information having been sent
 9 to said information center device.

1 11. A terminal machine which rewrites data in a
 2 recording medium prepared for a navigation device
 3 which is mountable on a moving object, wherein,
 4 said recording medium records map data, and
 5 said terminal machine comprises,
 6 a judging means which judges whether or not drive
 7 history information of said moving object is recorded
 8 in said recording medium, and
 9 a map updating means which reads out said drive
 10 history information when it is determined that the
 11 drive history information is recorded in said
 12 recording medium, and records the map data stored in
 13 its own storage unit into the recording medium prepared
 14 for said navigation device.

1 12. The navigation device according to claim 11,
 2 comprises,
 3 a history information recording means which
 4 records drive history information of said moving

5 object into said recording medium.

1 13. The navigation device according to claim 12,
 2 comprises a recording request accepting means which
 3 accepts a request whether or not the drive history
 4 information is recorded in said recording medium,
 5 wherein,
 6 said history information recording means records
 7 in said recording medium, the drive history
 8 information having been collected, if said recording
 9 request accepting means requests to record the drive
 10 history information.

1 14. The navigation device according to claim 12,
 2 comprising a type accepting means which accepts a
 3 selection of type of the drive history information to
 4 be recorded, wherein,
 5 said history information recording means records
 6 in said recording medium, the drive history
 7 information of a type that is selected for recording
 8 in said type accepting means.

1 15. The navigation device according to claim 12,
 2 comprising,
 3 a means which displays an advantage when the drive

4 history information is recorded in said recording
5 medium.

1 16. The navigation device according to claim 12,
2 comprising,
3 a means which erases information regarding a
4 particular road or information regarding a particular
5 date and time, from the drive history information
6 recorded in said recording medium

1 17. The navigation device according to claim 12,
2 wherein,
3 said history information recording means
4 encrypts the drive history information having been
5 collected, and records the encrypted information in
6 said recording medium.

1 18. A data rewriting method in a terminal machine which
2 performs data rewriting in the recording medium
3 prepared for a navigation device which is mountable
4 on a moving object, wherein,
5 map data is recorded in said recording medium,
6 and
7 said terminal machine executes,
8 a recording judging step which judges whether or

9 not drive history information of said moving object
 10 is recorded in said recording medium, and
 11 a map updating step in which when said recording
 12 judging step determines that the drive history
 13 information is recorded in said recording medium, said
 14 drive history information is read out, and recorded
 15 in an external storage unit, as well as recording the
 16 map data recorded in said external storage unit in a
 17 recording medium which is mountable on said navigation
 18 device.